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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,540	01/27/2004	John Hamilton McGillis	ITI-387A (501170.20388)	3085

7590 09/02/2004

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EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/766,540

**Applicant(s)**

MCGILLIS, JOHN HAMILTON

**Examiner**

Tara L. Mayo

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/27/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Figures 1 through 3 should each be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. Applicant is reminded to update the status of parent application no. 10/084,542 on page 1 of the Specification.

3. The disclosure is objected to because of the following informalities: undefined abbreviations. On page 1 of the Specification, define the first appearance of "LED." Appropriate correction is required.

### ***Claim Objections***

4. Claims 1, 3, 7, 8 and 9 are objected to because of the following informalities: minor grammatical errors and improper antecedent basis.

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In claim 1 on line 5, change "depths" to --depth--.

In claim 1 on line 16, delete "pine" and insert therefor --pipe--.

The scope of claim 8 is unclear because the "horizontal directional drilling machine" recited on lines 1 through 2 lacks proper antecedent basis. Claim 9 is similarly objected to.

Appropriate correction is required.

5. Applicant is advised that should claim 3 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 6, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable Duke et al. (U.S. Patent No. 4,384,624).

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Duke et al. '624, as seen in Figures 1 and 2, disclose a process for the trenchless installation of an underground product pipe from a first location to a second location at a predetermined depth, comprising:

with regard to claim 1,

digging a first access shaft (12) at the first location and a target access shaft (14) at the second location to the predetermined depth;

installing a pipe displacement machine (16) in the first access shaft;

jacking a steerable pilot tube (22) into the ground from the first access shaft to the target shaft displacing the soil to form a pilot pipe from the first access shaft to the target shaft;

installing a drill string (50) to replace the pilot pipe;

attaching a back reamer (32) of a first diameter to the drill string at the target shaft;

pulling the back reamer from the target shaft to the first access shaft; and

pulling a product pipe (74) into place I the line of the pilot pipe;

with regard to claim 6,

wherein the product pipe is a continuous length of pipe; and

with regard to claim 10,

wherein the product pipe is pulled into the line of the pilot pipe from the target access shaft to the first access shaft. (col. 3, lines 35 through 38).

Duke et al. '624 disclose all of the features of the claimed invention with the exception(s) of:

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with regard to claim 1,

the step of jacking additional pilot tube sections into the ground; and

with regard to claim 11,

pulling the product pipe into the line of the pilot pipe from the first access shaft to the target access shaft.

With regard to claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method disclosed by Duke et al. '624 such that it would include the step of jacking additional pilot tube sections into the ground since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

With regard to claim 11, it would have been obvious to one having ordinary skill in the art of pipe laying at the time of invention to modify the method disclosed by Duke et al. '624 such that the product pipe would be pulled from the first access shaft to the target access shaft as desired to introduce the product pipe into the line of the pilot pipe from the shaft nearest the supply of product pipe.

8. Claims 3, 4, 5 and 7 through 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duke et al. (U.S. Patent No. 4,384,624) in view of Hesse et al. (U.S. Patent No. 5,833,015A).

Duke et al. '624 disclose all of the features of the claimed invention with the exception(s) of:

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with regard to claims 3 and 7,

using a horizontal directional drilling machine to install the drill string;

with regard to claims 4 and 8,

positioning the horizontal directional drilling machine at least 15 feet from the first access shaft with at least 5 feet of distance for each foot that the pilot pipe is below the surface; and

with regard to claims 5 and 9,

pulling the back reamer through the bore formed by the drill string by reverse pulling of the horizontal directional drilling machine.

Hesse et al. '015, as seen in Figure 1, disclose a method of placing pipes in a pilot borehole comprising the steps of using a horizontal directional drilling machine (1) to introduce a drill string (3) into a pilot borehole (4) and pulling a drill head (5) through the bore formed by the drill string by reverse pulling of the horizontal directional drilling machine (col. 3, lines 50 through 67).

With regard to claims 3, 5, 7 and 9, it would have been obvious to one having ordinary skill in the art of pipe laying at the time the invention was made to modify the method disclosed by Duke et al. '624 with the use of a horizontal directional drilling machine and drill string as taught by Hesse et al. '015. The motivation would have been to enable the completion of multiple passages through the ground using a single machine.

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With regard to claims 4 and 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made determine the workable range of distance to position the horizontal directional drilling machine from the first access shaft, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).



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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1, 3, 4, 5, 6, 7, 8, 9, 10 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 11 and 12; 2 and 7; 3, 8, 11 and 12; 9; 10; 2 and 7; 8, 11 and 12; 5, 6, 11 and 12; 5, 6, 11 and 12; and 5, 6, 11 and 12 of U.S. Patent No. 6,682,264 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other.

With regard to claim 1, although the claims are not identical they are so close in content that they all cover the same thing. Specifically, Applicant's recited step of "jacking a steerable pilot tube and additional pilot sections into the ground" is anticipated by patented methods including the step of "jacking a steerable pilot tube and additional pilot sections below grade."

With regard to claim 1, although the claims are not identical they are so close in content that they all cover the same thing. Specifically, Applicant's broadly recited step of "installing a drill string" is met by the patented method step of "installing a drill string above ground."

With regard to claim 11, it would have been obvious to one having ordinary skill in the art of pipe laying at the time of invention to modify the method disclosed by U.S. Patent No. '264 such that it would include the step of pulling the product pipe

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from the first access shaft to the target access shaft as desired to introduce the product pipe into the line of the pilot pipe from the shaft nearest the supply of product pipe.

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 703-305-3019. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

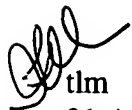
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703-308-3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

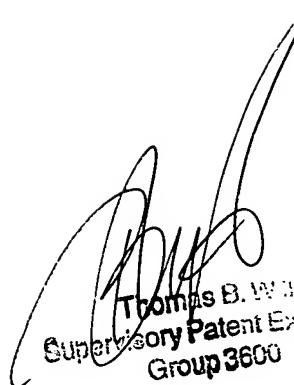
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31 August 2004

  
Thomas B. W. J.  
Supervisory Patent Examiner  
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